

## Plasma Outflows: Known Knowns, Known Unknowns, and The Unknown

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A brief summary is given of i) what we know from observing ionospheric outflows and ii) how outflow parameterizations are being used in global simulations to evaluate their effects on magnetospheric dynamics. Then, a list of unanswered questions and issues to be resolved is given, followed by a description of the known future mission plans expressed in the Heliophysics Roadmap, such as Origin of Near-Earth Plasmas (ONEP), and Ion-Neutral Coupling in the Atmosphere (INCA). Finally, a set of requirements for definitive plasma outflow observations are identified, along with possible methods for fulfilling them in future missions. Since results of the current Heliophysics Decadal Survey are expected soon, it is hoped that future plans can be summarized and discussed without speculation at the GEM 2012 meeting.